

**ABSTRACT**

Novel oligomers, and synthesis thereof, comprising one or more bi-, tri-, or polycyclic nucleoside analogues are disclosed herein. The nucleoside analogues have a "locked" structure, termed Locked Nucleoside Analogues (LNA). LNA's exhibit highly desirable and useful properties. LNA's are capable of forming nucleobase specific duplexes and triplexes with single and double stranded nucleic acids. These complexes exhibit higher thermostability than the corresponding complexes formed with normal nucleic acids. The properties of LNA's allow for a wide range of uses such as diagnostic agents and therapeutic agents in a mammal suffering from or susceptible to, various diseases.